

IN THE SPECIFICATION

The following paragraphs in the specification have been modified to correct errors.

Please replace the paragraph [0002] as originally filed with the following paragraph:

When inspecting and/or testing materials which produce a degree of back scattering, such as, for example, titanium, steel or nickel-base super alloys, focusing of the ultrasonic inspection beam enhances the back-reflected signal from flaws contained in the test material and also reduces the noise produced by the test material. This improves the signal to noise ratio (SNR) for all ultrasonic indications, and in turn improves the capability of detecting flaws and the probability of detection (POD), allowing for the detection of flaws having reflectivities equivalent to #1 (1/64") or #2 (2/64") flat bottom holes. Such inspections are often required for aircraft materials[[]], particularly those found in the rotating components of a jet engine.

Please replace the paragraph [0003] as originally filed with the following paragraph:

However, in addition to these benefits, the reduction in insonified material volume also reduces the volume of test material that is interrogated by each ultrasonic pulse. Therefore, many focused interrogating pulses are required to inspect the volume of material under test. The conventional ultrasonic solution involves a mechanical scanning ~~systems~~ system using a series of single ~~element~~ elements, spherically focused probes, each focused at a different depth in the material and spaced such that each individual probe setup produces a focal zone that slightly overlaps the next to

produce a uniform insonification over the entire depth of interest. Each of these individual zone setups is then scanned over the surface of the material to finally produce a three dimensional volume of data for the test object. This technique is generally referred to as a "multizone" inspection and is described in U.S. Patent 5,533,401A.

Please replace the paragraph [0029] as originally filed with the following paragraph:

Application of the two-dimensional phased array to a volumetric component and/or material to be tested, enables acquisition of focal characteristics, equivalent to those produced by spherically focused transducers. Application of the two-dimensional phased array also ~~enable~~ enables electronic correction for one and two dimensional surface curvatures or other complex geometry on the material to be tested.

Please replace the paragraph [0046] as originally filed with the following paragraph:

With reference to FIGS. 7-9, illustrations of various ultrasonic scanning beams producing characteristic focal zones, in accordance with embodiments of the present disclosure are shown. As seen in FIG. 7, array 100 includes a plano-concave lens 108a configured and dimensioned to produce a constant F/D ratio over the operating range of array 100. In particular, lens 108a is configured and dimensioned to manipulate ultrasonic beams 110 to produce uniform sized focal zones "F" in scanning beam 106. As will be appreciated, a F/D ratio may be defined as a ratio of the focal length of the plano-concave lens to its diameter. It describes the basic geometric architecture of the plano-concave lens, which affects its physical size, its design and its electrical performance.

Please replace the paragraph [0051] as originally filed with the following paragraph:

While the above disclosure is related to a phased array having a rectilinear pattern/arrangement, it is envisioned and within the scope of the present disclosure to provide for a phased array having a non-rectilinear ~~patter/arrangement~~ pattern/arrangement, such as, for example, staggered, stepped, off-set and the like. Furthermore, the elements may not be rectangular in shape, being round, elliptical, trapezoidal, or triangular. Finally, the above disclosure describes two dimensional transducers whose elements are spaced continuously and in a close packed fashion. It is also envisioned that in order to maximize the aperture size, the transducers may be arranged with relatively large spaces between them, or in a sparse fashion.